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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,607	02/16/2001	Paul A. Green JR.	SRT-014 (5049/23)	4369

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FLEURANTIN, JEAN B

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2172

DATE MAILED: 07/08/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

19

Office Action Summary	Application No.	Applicant(s)
	09/785,607	GREEN ET AL. <i>(Handwritten Mark)</i>
	Examiner	Art Unit
	Jean B Fleurantin	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 June 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 9-24 and 26-30 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 29 and 30 is/are allowed.

6) Claim(s) 9-24 and 26-28 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> .	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Response to Preliminary Amendment

1. Claims 9-24 and 26-30 are remained pending for examination.

Information Disclosure Statement

2. The references cited in the IDS, PTO-1449 have been fully considered.

Response to Applicant' Remarks

3. In response to Applicant'(s) arguments filed on 06/12/2003 with respect to restriction.

Group II, claims 9-24 and 26-30, drawn to pattern matching access, has been elected by the Applicant'(s) with traverse. And the limitations of claims 9-24 and 26-30 are discussed in the following action.

Applicant stated that on page 6, “the claims are related, insofar as they are all applicable, for example, to implementing support for standards-based file operations in proprietary operating systems.” However, it is respectively submitted that Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, the invention in Group I has separate utility such as manipulating data structure. Invention in Group II has separate utility such as query processing. See (MPEP 806.05 (d)). Invention III is independent disclosed fault-tolerant computer having a proprietary operating system and support for standards-compliant file operation comprising: two central processing units (CPUs), operating synchronously See (MPEP 806.04). Because these inventions are distinct for the

reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination as indicated is proper. Thus the restriction is maintained.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-15, 17-23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long et al. (US Pat. No. 5,991,763) ("Long").

As per claims 9 and 17, Long teaches a method for mapping a first file object identifier having a first bit size to a second file object identifier having a second bit size as claimed comprises the steps (a) receiving said first file object identifier associated with a file object (thus, an object file may then be obtained by using either the source code version of the data contained in data files; which is readable as receiving said first file object identifier associated with a file object)(see col. 1, lines 62-64); and

(c) providing said second file object identifier to facilitate access to said file object (thus, files which are normally accessed during the execution of a computer program include data files, in order to create object files from data files the data files are usually converted into source code for a higher programming language, converting data files into source code generally also requires a conversion of the source code to assembly language in order for an object file to be obtained

from the data file; which is readable as providing said second file object identifier to facilitate access to said file object)(see col. 4, lines 43-50). But, Long does not explicitly indicate transforming said first file object identifier into said second file object identifier based on at least one file system characteristic. However, Long implicitly indicates associated with converting snapshots of data files into object files, in figure 5 illustrates step 314 of figure 3, in a step 502, a new list of data files is generated, the list of data files used in step 402 of figure 4 is processed to create a new list of data files which includes new file names that are appropriate for a virtual file structure; which is readable as transforming said first file object identifier into said second file object identifier based on at least one file system characteristic, see col. 6, lines 53-59. Further, in column 2, lines 42-43, Long teaches a snapshot of the data file is created and converted into an object data file. Thus, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teachings of Long with transforming said first file object identifier into said second file object identifier based on at least one file system characteristic. This modification would allow the teachings of Long to provide additional data storage capacity, (see col. 8, lines 49-50).

As per claims 10 and 18, Long teaches the method as claimed wherein said file object is one of a file, a directory, and a symbolic link (see col. 7, lines 56-58).

As per claims 11 and 19, Long teaches the method as claimed wherein said second bit size is less than said first bit size (see col. 4, lines 10-17).

As per claims 12 and 20, Long teaches the method as claimed wherein said first file object identifier comprises a disk volume value, a disk block value and a block offset value (thus, our allocation map development provides the ability to allocates storage from the same pool of

disks in parallel while maintaining full consistency of the metadata; which is readable as wherein said first file object identifier comprises a disk volume value, a disk block value and a block offset value)(see col. 3, lines 58-60).

As per claims 13 and 21, Long teaches the method as claimed wherein said at least one file system characteristic comprises limiting the number of disks available in any logical volume to a 4 bit value (thus, each object file created in step 508 includes a hole of a size sufficient to accommodate data contained within a snapshot as specified in the data allocation file; which is readable as comprises limiting the number of disks available in any logical volume to a 4 bit value)(see col. 7, lines 33-35).

As per claims 14 and 22, teaches the method as claimed wherein said at least one file system characteristic comprises limiting the address granularity within a disk block to at least 32 bytes (thus, we have enhanced token modes for controlling file size, a byte range lock algorithm using a byte range token interface; which is readable as wherein said at least one file system characteristic comprises limiting the address granularity within a disk block to at least 32 bytes)(see col. 4, lines 9-17). Further, in column 16, lines 10-20, Long teaches most importantly the location of the file data on disk ‘i.e. which disk blocks hold the file data’, allocation map that records which disk blocks are currently in use to store metadata and the file data.

As per claims 15 and 23, Long teaches the method as claimed wherein said at least one file system characteristic comprises limiting file lengths to at least 128 bytes (thus, we have enhanced token modes for controlling file size, a byte range lock algorithm using a byte range token interface; which is readable as wherein said at least one file system characteristic comprises limiting file lengths to at least 128 bytes)(see col. 4, lines 9-17).

As per claim 26, teaches the fault-tolerant computer as claimed wherein said proprietary operating system is Stratus Virtual Operating System (VOS), (see cols. 3-5, lines 25-9).

5. Claims 16, 24, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long et al. (US Pat. No. 5,991,763) in view of Schmuck et al. ("Long"), ("Schmuck").

As per claims 16, 24, 27, 28 and 30, Long teaches the claimed subject matter except wherein said second file object identifier is a POSIX file. However, Schmuck teaches the proposed POSIX access control list standard specifies that when a new file or directory is created, see col. 27, lines 55-65. Thus, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teachings of Long and Schmuck with a POSIX file. This modification would allow the teachings of Long and Schmuck to provide a shared disk file system where a file system instance on each machine has identical access to all of the disks coupled to and forming a part in the file system, (see col. 3, lines 27-30).

6. The following is an examiner's statement of reasons for allowance:

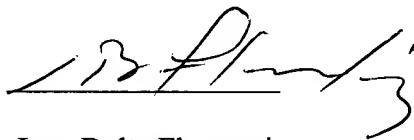
As per claims 29 and 30, the prior art of record does not teach or suggest in combination of steps as recited in claim 29, wherein combination of steps including in addition to the discussion in claim 9, Long further teaches (d) computing a temporary file object identifier for said located file object; (e) iterating step (d) for file objects in said specified location on the disk until the temporary file object identifier matches said first file object identifier; computing a second file object identifier for said file object with said temporary file object identifier matching said file object identifier.

Conclusion

7. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at **(703) 305-8449**. The FAX phone numbers for the Group 2100 Customer Service Center are: ***After Final* (703) 746-7238, *Official* (703) 746-7239, and *Non-Official* (703) 746-7240**. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "**DRAFT**".

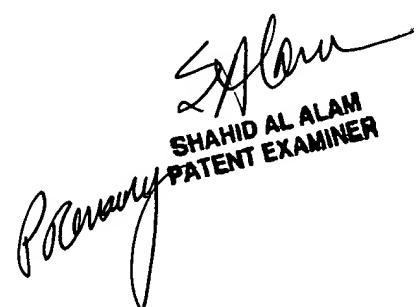
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are **(703) 306-5631, (703) 306-5632, (703) 306-5633**.



Jean Bolte Fleurantin

2003-06-24

JBF/



SHAHID AL ALAM
PATENT EXAMINER